seniors

infectious disease

(   )

① ع.٢

Kenia 1931 Egypt 1977	RVF - Rift Vally fever (A) حمى الوادي المتصدع infectious enZootic Hepatitis	Ⓑ ع Blue tongue (BT) (1.st A)
Def	- acute Arthropod borne viral disease of animal & Human not <u>equine</u> ch' by : - fever - ↑ Mortality in young. - abortion in adult (without Congential anomalies)	- infectious non-Contagious insect borne viral sesonal disease of sheep mainly occasionally Cattle. ch' by : fever, stomatitis, Enteritis - Laminess - Rhinitis - cyanosis of tongue
Cause	family → Bunyrauiridea G → phelbo virus (arbo virus RNA) * strain ZH_{501} : grow on Vero Cells - BHK_{21} (Viscero tropic) * viable -20°c for 8 years, 4 month → Room temp ch' by : Heamoggultination in ♂ geese RBCs & white geese	family : Reoviridea G : orbivirus arbovirus RNA 26 serotype → Some Cross prot. → Some not has cross protection * Recovery Animal become Carrier Cattle 3 month sheep 4 month Killed by formaline 10%
Source of infection	- infected insect (mosquites - culex) - infected animal	infected insect (culicods) - infected semen - infected animal
mode of Trans.	<u>Bitting</u> : by infected (Mosquies - culex) in Egypt → Mechanical → Transovarian → Biological (20 : 29) day * of blood meal of Viremia } female Ⓐ → inhalation → susp → mosquites → Biological, Mechanical, Transovarian → Wound → human * inhalation rare * wound in human	- Bitting culicoids ♀ only * mainly biologically 10:14 day of Blood meal of Vermia - one bite containe 100,000 : 1,000,000 viral particles * mechanical Rare * may be mosquities * Vertical * Venereal (Semen)

	RVF	B.T
Host	- Small Ruminant - Human - may Camel - cattle *factors:- - fetal in young, mild in adult - Season : ↑ summer due to high insect activity.	- sheep mainly - cattle occasionally → Main Resvoir Mcf Gale * factor: - african breed more resistant than imported - ↑ summer → ↑ insect activity
pathogensis	Virus → Vector → Host → Blood viremia fever 7 days → Liver → destrucation in liver cells → acute hepatic insuffeciency → death Blood viremia fever 7 days → utres → impairment fetal circulation → abortion	Virus → vector (culicoids, Biological) → Host sheep → Blood 5:6 day fever → Localized → Vascular endothelium → Vasculitis → Emboli thrombus → Edema & Cynosis
signs	① kid, Lamb IP 12 hrs - fever - staggering - Collapse - Coma - Death 24:48 hrs - Mortaility rate 90% - Calf 10:40 % Adult - abortion 40:90% at any stage - nasal Discharge - may bloody diarrhea abortion Cattle 10% sheep 20:30% Human - fever - Headache - pain in joint - vomitting - flushing face & congested eye ↓ May Complicated - encephalities (fatal) - Heamorrhagic fever - Blindness → temporary or perminant	- fever 40:41°C, 5:6 day - morbidity rate 20:40 % - Long Course .10 day. - nasal discharge - bloody diarrhea. - Salivation - Lamness → red ban above Cornet - knee walking * - Recumbancy - Abortion - still birth - offensive odour mouth * - excoriation تسلخات - HyDermia * cyanosis * edema in heart → 10% of Cattle signs - stiffness four Legs + signs of sheep * N.B: Cardic form of AHS in equine cause cyanosis in Buccal cavity so called B.T of equine

	RVF	B.T
P.M	Liver *enlargment *congested * Mottled appearence of Liver * grey necrotic foci diemeter 1:2 mm	- Hypermia skeletal ms. - Hge base of pulmonary artery (diagnostic) - cyanosis back of tongue
Dignosis	① High Mortality of young - abortion in adult ② Seasonal occurance Arthropod ③ Human cases with fever (flu-Like symptoms) **Summer abortion** - RVF - blue tongue - akabne [1] signs & P.M [3] viral isolation [2] Lab inculation I/C mice → paralysis & death 24 hr **Sample** - mosquites - milk - blood → during Viremia (The best) - Serum - aborted fetus - dead animal * T.C BHK_{21} - MDBK - Vero cell - CRE * Seriology test : HI - SNT - Eliza - CFT * N.B : recoverd animel has immunity for 2:3 years	- signs - P.M - seasonal occurance - virus isolation **Samples:** - Blood (non-frozen) refrigation 4°C, freezing kill virus. - T.C : vero - MDBK - BHK_{21} * isolation & identification of virus → on ECE 10:12 day. * Seriology : Eliza - CFT - SNT * Transmission test: G → Group I/V injection G_1 susceptable sheep → signs G_2 Vaccinated (immunized) no signs

	RVF	B.T

D.D

RVF

1- High mortaility in young

- balbykidney
- septicemic Colibacillosis
- septicemic Salmonollosis

2- High abortion in adult

- Bracella
- Akabne
- Campylobacter
- Listeriosis

} Late stage

	RVF	wessel born
Virus	phelbo V.	flavi V.
mortality Kid, Lamb	High 90%	Low 10%
Abortion	↑	↓
Icterus	may be	+ ve
		South africa

*abortion in Ewe

- Bact.
  - *Brucella
  - *Listeriosis
  - *Leptospirasis
  - *Campylobacter
- Viral
  - *RVF
  - *B.T
  - *Border disease
  - *Akabne
- fungal
  - *Aspergillosis
- parasite
  - Toxoplasmosis

B.T

- P.P.R
- FMD → vesicles
  no cyanosis, no diarrhea.
- sheep pox
  no Lamness, no diarrhea

treatment

RVF

no specific ttt

- antibiotic
- anti pyeritic
- anti-inflomatory

B.T

- symptomatic
- antibiotic
- anti-pyertic
- anti-inflamatory
- local antiseptic
- fluid therapy

	RVF	B.T
Control	ⓐ Vector control:- 1- Larvicide 2- insecticide 3- Repellent 4- Biological → fungi, → plant 5- Smoke fire Housing sheep at night 6- insect proof stable	ⓐ Hygienic measures - Hygienic disposal of dead carcass - disinfectant with formaline. ⓑ Prevent spread of infection - isolation of infected Animal
Vaccination	ⓐ inactivated R.V vaccine 1mL sheep S/C 6month after 2mL cattle S/C 2nd dose after 4 weeks, Booster annually, 1 year immunity. ⓑ live attenuated vaccine 1cm S/C 2:3 year immunity disadvantages:- + abortogenic + Viremia + Congenital Anomalies	+ inactivated polyvalent 1mL S/C, 6 month safe + Live attenuated polyvalent 1mL S/C 1 year at spring before shering

2 م	PPR (Kata) *pest des petits Ruminant	sheep & goat pox (SGP) Capripox	CPD (Contagious pastular dermatitis)
Def	- acute highly contagious viral dis. of goat & sheep sheep < goat ~~disease~~ cha' by: epithliotropic of GIT - erosion - ulceration of mouth - Salivation, stomatitis - Diarrhea, ↑ mortality - Pneumonia	- Highly contagious viral disease of sheep & goat. ch' by: skin lesion → un wooled area visceral lesion	- Contagious Ecthyma - CE - ORF Score mouth. * infectious non febrile viral disease of sheep & goat ch' by: scobby lesion on lips & muzzle, oral commisure ⓒ ع.٢م
Cause	RNA family paramyxo viridea G: Morbillivirus - Senstive & fragile, so killed by sun light. - Cell associated virus (Lymphotropic - immunosuppression) - Cross protection Rubella ⇓ Canine distemper ⇐ PPR ⇔ RP ⇓ H. Measles R.P → sheep → Ab for PPR PPR → cattle → Ab for RP	family: pox viridea DNA G: Capri pox virus sheep pox → sheep - goat goat pox → goat - sheep goat pox - dangerous, sever in sheep ↓ - protection agonist - goat pox - sheep pox - CPD sheep pox - protection agonist it self only. NB: out break of SGP in sheep prevent LSD in cattle & vice versa	Family: pox viridea DNA G: parapox * Zoonotic virus * epithliotropic (skin) * b - strain * has relationship with psudo pox of cow

	PPR	SGP	CPD
Source of infection	-all secretion of diseased A' & excretion -sputum -feces -Tears	-scabs -Exudute from skin lesion -saliva -milk -nasal discharge -wool	-scabs -contaminated food & water
Susp. Host	sheep -goat *factors:- 1-young more sever than adult. 2-age: 3/8 month 3-all sex are suscepitable. 4-Some breed of sheep are resistant (Marino sheep)	~~Direct~~ sheep - goat factors:- ① more sever in young ② some breeds of sheep are resistant (Marino sheep)	sheep - goat *camel - human *suckling Lamb (3:6) month *feed Lot Lamb Factors:- 3:6 month more susceptable more susceptable in young
Mode of trans.	manily inhalation -ingestion of contaminated food	Direct & indirect contact through -skin abrasion (mainly) May - Arthropods -inhalation	Direct & indirect contact through: skin abrasion (mainly)
pathogenesis	Virus —inhalation→ Blood → Localized (GIT - Resp) 3/4 day viremia associated with epith. → stomitis, erosion, ulceration → salivation → Sever bloody diarrhea → dehydration → death	Virus → sheep & goat → blood viremia 3/4 day → Localized → skin → erythema → maeule → papule → vesicle → pastule → permant scar Course 4/5 week	Virus → skin → pastule → proliferated rasied lesion → area in ulcer → thick tenicious scar

Young - RUF - stummar ablation
BT
Lamness - PPR
Skin lesion - CPD
- SGP
oral lesion

Complications:-
- Aborsion.
- Coccidia
- Pasterlla

N.B: disease caused oral lesion: -PPR -B.T -FMD -CPD
- Malignant form of SGP

* disease caused Lamness:- -B.T -FMD -CRD
-infectious foot rot -Black Leg

2

	PPR	SGP	CPD
Signs	I.P 2days , Course 7days mortality: 55:80% morbidity: 90% +epitheliotropic of GIT -fever 3:4 days -Salivation -Lacrimation -nasal discharge * 2nd day of fever:- -ulceration & erosion of Buccal mucosa (bran mash) -may Constipation * 3rd day of fever -watery diarrhea (may bloody) -Respiratory signs -dehydration -Coma -death due to dehydration	Ip 4days , Course 4:5 weeks * Malignant form (lambs - kids) Ip 4:7 day + fever 3: day + Lumpness - depression * Arched back +salivation + nasal discharge + Lacrimation + rough wool + animal may be die before any lesion appear -Typical pox Lesion (erythema - macule - papule - vesicle - pustule) -in ~~woo~~ unwoold skin (nostril - thigh - teat udder - scrotum - eye Lid) * Benign form (adult) -mild fever -mild systemic reaction -abortion may be occur. Typical pox Lesion in unwoold skin + sometimes generlized , sometimes not found all stages of pox lesion so called "poxstone"	Course 1:4 week + Thick tenicious scar covering area of ulceration & proliferative area. -Lesion on oral Commisure (Lips, nose, muzzle, baccel mucosa) -Lamb die from poor suckling or feed. -High Morbidity. -mortality not more 1%
P.M	-dehydration carcess -Hind Quarter solid feces -mouth erosion & ulceration -Sever Congestion of abomasum -small intestine → inflammed & erosions + Rectum: Zebra-stripping	Typical pox Lesion (buccal cavity - Larynx pharynx) + visceral lesion + Enlarged L.N	No P.M

	PPR	SGP	CPD
Diagnosis	1- Signs & P.M - ↑ morbidity & Mortality 2- Viral isolation - Sample: blood, not more than 2hr after death. - Serum - feces - Saliva - detection of viral Ag AGPT - AGID * isolation & identification of virus on Lamb Kidney cell * Histopathology ICIB & INIB * Serilogy test - Eliza - SNT	- History - signs - PM - virus isolation * Sample - Lesion of skin → T.C vero cell - isolation & identification on ~~[illegible]~~ CAM $\xrightarrow[\text{day}]{10:12}$ heamorrhagic pocks - Histopathology → ICIB	- History - signs - virus isolation - skin lesion As SGP Histo Pathology → ICIB

*D.D:-

Mange: Sever Itching - Small nodule hairy parts → one stage

~~Dermatophilosis → [illegible]~~

D.D

FMD → vesicle - Lamness
no diarrhea

B.T	PPR
orbivirus	morbillivirus
sheep-goat	goat-sheep
- Vector	inhalation
- Summer	any season
- cyanosis - ulceration	erosion
- odema - excertion	ulceration
- Lamness	no Lamness
- no Penomonia	Penomonia

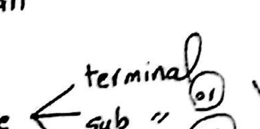
SGP	CPP
- Capri pox	Para pox
- all stages	- Young only 3:18 m
- un wooled skin	- oral commisure - Lips muzzle
- no lamness	-
- fever +	+
-	-
- Coarse 4:5 week	Coarse 1:4 week
- Zoonotic -	Human (+)
- typical pox lesion	thick tenicious scar

→ نفس التالية

	PPR	SGP	CPD
ttt	Recover A has immunity 2:3 year - systemic & Local ttt - fluid therapy	- no specific treatment - Local antiseptic - anti biotic - anti pyretic	- Local ttt - Local antiseptic Betadine or gentiniana - Removal of scabs
prevention & Control	1- Notification (Notificable dis.) 2- Restrication of farm & markets 3- Hygienic disposal carcass by Burning - Buring 4- disinfection by formaline. 5- Vaccination + Live attenuated T.C vaccine 1Cm, S/C, immunity 1:3 years - No past vaccinal Reaction - No seceration in excreation of animal - protection begin in 3rd day after injection by interferon, after 10 days protectio by A.B	1- seperation & isolation of infected animal. 2- Hygienic dispasal of dead carcass 3- disinfection by formaline 10% 4- Vaccination. inactivated → un commen, 6 month immunity * Live attenuated (Romanion strain) I/D ½ Cm, immunity → 1 year - at un wooled skin past vaccinal reaction pus - inflammation at site of injection * Recoverd animal Live long immune, CPD → 2:3 year immune.	Control:- - isolation & separation of infected animal. - disinfection - vaccination by:- + Live attenuated vaccine made from suspension of scabs in glycerol solution & administration by scarfication * scab: dryness → brushing → powder → suspension glycerol saline 10% → scarfication

Clostridial diseases

خاصرة ٣



General characters :-

) Infectious soil born disease affect animal and may be human

) Caused by G +ve, spore forming, anaerobic bacilli. (spore ← terminal / sub " / central)

) Motile, non capsulated except cl. perfringes.

1) cl → part of normal flora of GIT of animal & human → so Contamination of natural orfice & surface of animal & environment.

) M.O become pathogenic under certain conditions & produce exotoxin.

) Pathogenicity depend on toxin "Toxemic disease" → Toxemia

M.O produce different types of toxins

- Major
  - α
  - β
  - ε
  - Iota
- Minor
  - ⊖ Theta
  - δ
  - Delta

7) Effect of toxin → necrosis, Lethal, hemolytic

3) Mode of transmission
- → Mainly by ingestion of spore
- → May be through wound

9) classification

- Neurotropic
- Histotoxic
- Enterotoxemic

<u>Another classification</u>

Invasive

.M.O (spore) enter the body
→ under certain conditions
→ vegitative → toxin

Non Invasive

- Ingestion of toxin directly
- Toxin only enter the body.

10) Most of them cause 1. sudden death 2. short course
2. treatment of low value.

1) Diagnosis depend on P.M, Isolation & identification, sudden death

2) low morbidity & high mortality (100%)

N.B) Soil borne diseases → Anthrax, → clostridial diseases

Diagnosis Depend on :-

1. sudden death, P.M
2. Direct smear (G +ve bacilli)
3. Isolation from Lesion "anaerobic" → Cooked meat media
4. Demonstration of toxin in mice → death within 24 hrs.
5. Identification of toxin → mouse protection test or toxin-antitoxin neutralization test

Disease	Etiology	Host	Age	route	P.M	predisposing Factors	
Lamb dysentry	Cl. perFringes type B	suckling lamb	1-3 w up to 1 m	Ingestion of spore	In SI "Ileum" → dehydrated carcass * soiled with Feces * Severe Hge enteritis * large ulcer FSC * content "bloody" * serous Fluid in peritenium & pericardium	- good Condition + single than twins + over suckling after starvation	-Per acute ↳ sudden death ↳ without previous signs. -acute → abdominal pai[n] → bloody diarrhea or brown. - α - β ?- E
Pulpy Kidney	Cl. perFringes type D	Feet of sheep	2-3 up to 6 months -may be to 1 year.	//	+, Kidney soFt rapid autolysis	-over eating of Conc, starch, glains	- α - E
struck Hemorrhagic enteritis)	Cl. perFringes type c	Adult sheep	Adult = 1 year = yearling	//	//	good Condition	α - β
Black disease infectious necrotic hepatitis)	cl. novyi type B	-sheep mainly -rarely in Cattle	Adult	//	-Mainly in liver -hepatic necrosis 1-5 cm - large	Fascioliasis	NB RVF Called infectious enzootic hepatitis -live ch' by pin point necrotizing Foci "1-2 cm"
Bacillary Hemoglobin urea	Cl. novyi type D	- mainly Cattle -rarly sheep	Adult	//	liver inFarct 5-20 cm	Fascioliasis	-[illegible]in Cause red urine
Big head (swollen head)	cl. novyi type A	Ram "Adult"	1-2 year "Adult"	wound	Edema in head + wound	Fighting during breeding	

Disease	Etiology	Host	Age	route	P.M	predisposing factors
Black leg "Black quarter"	cl. chauvii	Cattle → sheep →	6-24 m All ages	→ ingestion of spore → rarly wound → wound mainly	In muscles - Edema - crepitation - gas formation - offensive odor - H_2S · blacking - painful hot then became cold, painless	
Malignant Edema "Gas gangrene"	cl. septicum	All animals including human	All ages	wound	- Edema, crepitation - offensive odor	
Braxy "Brad spot"	cl. septicum	sheep	6-18 m.	ingestion of spore	In abomasum - sever hemorrhage - Inflammation - Ulceration	- snow food - frothy grass
Tetanus	cl. tetani	All animals - human, sheep, goat, equine highly suscep. Ruminant → [illegible]	All ages	wound "deeply located"	No P.M	Both non invasive neurotropic
Botulism	cl. botulinum	all animals	all ages	ingestion		

⇒ Diseases enter Through wound :-

1) Tetanus
2) Malignant edema
3) Black leg "in sheep"
4) Big head

N.B ⇒ Caseous lymphadenitis is non clostridial disease - accidental

⇒ Cause of wound in sheep:-

1) shearing
2) docking
3) open castration
4) lambing in dam due to laceration in genital tract.
5) umbilical wound in young.

N.B pregnant dam take vaccine in late stage that poster before parturition by 2 weeks.

Control

1) Avoid predisposing Factors
   → over heating
   → " suckling
   → " crowding
   → wound
2) Good mangement of wound "after shearing, docking, etc..."
3) Hygenic disposal of Carcass & disinfection of the Farm
4) oral administration of antibiotic (as) oxytetracycline in food & water
   "or"
   Injection : penicillin (drug of choice)
   · sulphonamides
5) Fluid Therapy
6) vaccination

1) Vaccination

Formaline Killed vaccine "Toxoid"
"whole culture vaccine"

	Cattle		sheep
Dose	2 doses		2 doses
1st	5 ml	" with 4-6 w. interval" between 2 doses	3 ml
2nd	3 ml		2 ml
booster	Repeated after 6 month with the same doses.		Cattle → 5 mL; sheep → 3 mL

Name of vaccine: Covaxin 8 - Covaxin 10 - ultra bac - polyvalent vaccine

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Black disease

Pathogenesis

spore "cl. novyi B" → SI → Blood → liver "latent"

↓ + Fascioliasis "predisposing factor"

low oxidation-reduction potential "Anaerobic Condition" → Multiplication → Toxin → Toxemia → shock → death

Toxin → Bl. vs. of S/C (skin) → Cyanosis "black disease"

Bacillary Hb urea

⇒ Pathogenesis as black disease

⇒ Toxin → hemolysis of RBCs "Red urine"

N.B ⇒ sudden death without previous signs may occur in all clostridial dis.

Malignant edema

- wide The wound to enter O_2 → injection of H_2O_2 Then infiltration of penicillin at site of wound + systemic penicillin

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- Pathogenesis of 1st 3 diseases 'enterotoxemia in sheep"

Spore —ingestion→ S I —under Certain Conditions→ vegetative → multiplication → Toxin → ↑ motility, ↑ permiability → Diarrhea → Dehydration → shock → sudden death

محاضره الرابعه د/ محمد

1. Disease Causing Nervous Manifestation in «Sheep» [1]

م ١ / ع ٤

	1- Listerosis	2- Coenurosis الدوران الطفيلي
Def:-	- Acute infectous disease affecting wide range of Animals ch by [1]. nervous manifestation. [2]- Septicemia. [3]- Abortion — Cattle At 7m / sheep At 3m	- Acute or Chronic disease of sheep caused by invasion of The brain by intermidiate stage of (Taenia multiceps) Cenurus Cerebral. Ch by:- [1]- Nervous Manifest [2]- unilatral or bilataral blindness. (3)- Death after long Period. مم
Distrub	wide range disease. as:- 1. wide range host. 2. " " temperature. 3. " " of signs.	world wide distrubution.
Caustive agent OR etiology	bacterial disease. * L. monocytogenes 5 serotypes with many subtypes — 1/2 a, 1/2 b, 3b, 4b / in egypt مهم • char. of L. mono.cytoge 1- G +ve - motile - intracellular 2- Cold enrichment → imp. in isolation. 3- grow on bl.agar → B. hemolysis. * Listeria ivanovi ---→ Food Posion.	Parasitic in nature. * Taenia multiceps. ↓ Live in sm. intestine of Dog. * Cenurus Cerebralis. ↓ Live in brain of Sheep.
Suss	All animals. • Sheep > Cattle, buffalo > goat > equine > Pig > dog > Cat > Rabbit	• Sheep > Cattle. horse. wild ruminant but Very rare.

	Listeriosis.	Coenurosis.
Sourse of inf	① Abortion → Aborted fetus ↓ Fetal m.m ↓ vaginal discharge. ②- Septicemia → Feces - urine ↘ milk. ③- meninge.encephalic. → ingestion of contaminated material (Food, water). → injury in oropharyngeal cavity → Trigemenal N.	Dog suffer from T. multiceps in small intestine. ↓ • Feces contain eggs
Method of transmission:-	[1] ingestion of contaminated Food, water → Septicemia in monogastric animal, calf - lamb then localized in different organ . uterus → Abortion. . Liver - spleen. . Lung → Pneumonia . udder → mastitis. [2] inhalation through mm of Nasopharynex • → Trigeminal N —ascend to→ microabscess in brain stem → meningioenchiphilitis. • optic N → endophthalmitis. • Spinal cord → spinal mylitis "infect of myelin sheath"	Life cycle → infected dog —eggs / feces→ contaminated pasture. ↓ larva ingestion by sheep. ↓ blood. migration to nervous tissue. during migration Acute stage appear. → (6-8 m) mature (complete) cyst in brain (5 cm). ↓ Pressure atrophy. ↓ Chronic stage in sheep death after long period. (dog eat infected brain of sheep « تعاد الدورة » → infected dog)

Listerosis

cli. signs:-

1 Meningeo-encephalic Form:-

a- transient Fever (during bacteremia only).
b- Separation from flock.
c- head pressing
d- unable to rise head.
e- Circuling:- in the same side of lesion in brain stem.
   D.D → Cenurus
F- Facial Paralysis detected by:-
   → drolling of saliva.
   → inability to masticate with hanging food in mouth.
   → drop of ear, eye lid of affected side
   → Paralysis & Protrasion of tongue in sheep - Cattle.
- Recumbancy   - death in late stage.

2 Abortion Form:-

At 7th in cattle.
At 12 wk / 3 month in sheep.
Abortion associated with Septicemia
Aborted lamb — necrotic Foci Liver + heart + spleen.
  | yellow orange meconium.

3 Septicemic Form:-

in monogastric A & lamb - Calf.
grayish dirrhea - septicemia - death

4 others:-

- udder → mastitis without change in milk consistutation.
- Lung → Pneumonia.
- Spinal Cord → spinal mylitis & knuckling of hind limb
  Fore limbs ← Paralysis - Paresis
  Cenurosis زي short Course death

Coenurosis.

1 Acute stage:-

- Variable degree of blindness
- ataxia   - tremors.
- nystagmus → (uncontrolled movement of eye ball espicialy after head movement by tester).
- excitability.
- droping upper eye lid.

لو ترض الطبيب راعي يريح any (anti inflamatory drugs) case will improve
إذا لم يتحسن بعد فترة (٢-٣ شهور او ٨ شهور)
Chronic signs will appear
Cyst Formation
No ttt

2 Chronic stage:-

Acute irritation include wild expression + Frenzed run.
- head tilt:- deviation of head - neck to one side
- deviation of head - Neck from longitud axis.
- blindness in one eye.
- epliptic Convulsion.
- dullness
- softning of skull
** death after long Period.

لو الاعراض مستمره لحوالي فتره [illegible] شهور
تبقى Conurosis
لو listeriosis ومعالجتش الحيوان هيموت

P.M	- Septicemia → Necrotic Foci in internal organ espicially. (Liver - Splean - heart). - Abortion :- Placentitis Aborted lamb [Yellow orang muconium / necrotic foci in (Liver - Splean - Heart). - mening enephalitis - - Thickening of meninges تسمّك inflamation. Salcic / gyri of brain تلافيف - Congestion of bl. vesseles of brain stem [Pores / m-oblengata.	Cyst in Brain ↓ thin wall
risk factors.	All ages suss stress [winter. / humidity. unProper made silage (it's PH exceed 5). Proper made silage must have PH → acidic + Anaerobic Condition M.O [grow At wide range of temp 4 - 44°C / Live in Feces For 3m → sheep, 2 year → Cattle	

- economic loses
Death   Zoonosis
Abortion   Skin lesion
Cost of tt and control

Diagnosis - Field
- → Case history - epidemiology
- → Continous relapse -
- → Signs → • Circuling.
- → PM

• lab Sample:
- Abortion:- • Abomasal Content
- • liver - spleen of aborted lamb

Meningeoencephalitic form:-
- • Brain stem.

Septicemia:- internal organ.

isolation:-

Brain stem sample → Palcam agar or broth. → 4 wk in refregrator 4°C = Cold enrichment.

microscopical:- gram stain

G+ve, short bacilli or coccobacilli.

* detect of m.o motility.

Wet mount tech
↳ tumbling motility.

(NaCl 0.9%, drop of broth.)

→ oil immersion lense → Jerking motility.

due to presence of Pritrichous flagelles.

on semi solid media → umberella like growth or motility.

(← bact. loop)

• Nervous signs - head tilt

Presence of dog with sheep.

Circuling in Canurosis → against side of Cyst

" " Listeriosis → same side of lesion.

Tests to detect or determine the site of cyst.

- blind fold test
- knuckling test

• I/D inoculation of sample.
- have no value
- as false +ve - false -ve result one wide

Keys to locate cyst →
- → 80% in → Cerebral hemisphere.
- ↳ 10% → Cerebellum.
- ↳ 8% → multilocation.
- ↳ 2% rare → spinal cord.

unilatral blindness → Cerebral cyst (Superfascial)

Bi " " → Cerebellar cyst (deep)

• narrow diameter circle 1-2 meter ↘ Superfascial

• head pressing → frontal loop.

lab diagnosis:-
- • detect egg in feces.
- • Cyst in skull of sheep.

* lab Animal :-

① Anton test → G. Pig or rabbit
instillation of sample in eye
→ +ve is Purulent
Kerato conjuctivitis.

② Mice → IP injection of
0.1 ml of sample.
→ Death in 3-7 days.

• Histo Pathology :-
1- Micro abscess in brain stem.
2. Necrotic foci in Liver, Spleen
heart.

• CSF analysis :-
obtained from lumbosacral
space in sheep
→ ↑ total Protien.
↘ leucocytic count.

D.D

differentiated from
* Disease causing abortion.
* disease causing nervous
manifestation.

صـ 279 الكتاب

1- disease causing abortion in sheep
2- " " " " cattle.
غير مطلوب هذا الترم
3- listeriosis _ Cenurosis.
4- disease causing Nervous
manifestation. ↓
سوف يتم سردها من نهاية المذكرة.

listeriosis	Cenurosis
ttt	

ttt

listeriosis

Precaution must be taken before ttt.

- ttt must be as early as possible.
- antibiotic used should be.
  1- act on G +ve
  2- Pass bl. brain barrier as
     - Pencillin.
     - chloramphenicol.

1. **Antibiotic**
   ① Pencillin
   - I/m 44000 Iu/kg twice daily → 10-14 day.
   then 22000 Iu/kg twice daily → 10-14 day.

   ② ampicillin The best
   20 mg/kg – twice daily → 7-10 day.

   ③ borgal → (Sulfa + trimethoprim).
   1mL/15kg every 48hr
   يؤخذ الأول ثانية

2. **NSAIDs** 1. fl. megulumin.
3. **Supportive ttt** Vit B complex.
4. **in fasted A** fluid therapy.

Control of listeriosis:-

→ Prevent poor made silage.
→ avoid fecal oral route contamination by.
- change diet or chang pasture.
- water. feeding troughes must be higher than ground.

+ vaccination.

Cenurosis

No ttt

Fungicidal if the Animal is valuable

Control of Cenurosis

- → Dog. ① regular deworming of dogs kept with sheep.
- → Pasture. ② avoid contami of pasture
  ③ Prevent sheep to graze on contam pasture.
- → diseased sheep ④ hygi. disposal of affected sheep (brain).

Vaccination of listeriosis.

- Live att → must in endemic area as vaccine Live So m.o shed in feces so if free area you will introduce the infection to it.
- killed not useful not give complete protection

N.B outbreak → ttt + control with No vaccine.

No outbreak → vaccine.

	Listeriosis	Coenurosis.
Syn	Circuling disease	Gid - sturdy.
C-agent	L- monocytogen	C. Cerebralis . inf. stage of T. multiceps
distribution	in temp range 4-44°C	world wide
Fever	transiant during bacteiima only	—
Zoonotic	+ + + +	rare.
Abortion	+	—
Corneal ulcer diarrhea Fascial Paralysis.	+	—
softining of skull Frenzed run.	—	+
Liver	necrotic foci	No.
brain	- micro abscess in brain stem. - thickness - cloudness of meninges.	- Cyst in brain. - if you open before cyst development you find migratory tract.
tt	- good in early stage - Pencillins.	- No tt - fungicidal if viliable animal
epidemology	Sporadic • short course • if no tt in early → death	• out break • long course → then death

	Nasal mysis	Scarpie SCP
Syn.	astrus ovis infestation. Nasal bot = head bot, grut	
Def:-	• Parasitic disease of sheep ch' by chronic rhinitis sinusitis - mucopurulent nasal discharge.	• Chronic disease of adult sheep ch' by:- Pruritus - sever itching. Nervous manifestation - Tremors.
Causitive agent.	osterus ovis.	Prion (protenceous material) without DNA or RNA
N.B.	• الاعراض ممكن توصل لمرحلة Circuling يعني مش اى حالة فيها (//) تبقى Listeriosis or Cenurosis. لازم نشوف باقي الاعراض ← muc-Purulent Nasal discharge ⇒ Nasal Mysis.	diagnosis very difficult in healthy animal as the body can't identify the cause. No Ab ⟶ No Serology.
Sourse of inf		• Causitive agent descend in placenta fetal fluid only. Not descend in other secretion.
Mode of transm	Life Cycle adult —egg→ nostril of sheep ↓ larva Feed on mucus & epithelium ↓ 3rd larva in nasal cavity → Continous irritant (هنا الاعراض تظهر) → Sneezing → ground → adult	• Verticle • horizontal → exposure to contamin material (placenta - fetal fluid). by ingestion mainly-

adult worm ⟶ 500 egg.

morbidity ⟶ very high

Mortility ⟶ No

⇒ Rhinitis, sinusitis may last for 10 month. لانه اليرقات مازالت موجودة جوا التجويف الأنفي بعد ١٠ شهور تبقى بالغة وتنزل على الأرض.

Signs	• irritation - restlessness - Circuling • Animal hide bet other Animals. • Seek Cool . humid area . • rub against hard object / head shaking. • sheep lift their feet - scratch Nose • bellow تترواتأ - Snaezing . *** Muco Puruleul Nasal discharge difficult breathing.	• Changing behaviour - freezing gait. • tremors of head . • lose of wool . • Scratching against hard object. • 6.w → 6m → death.
Diagnosis	Field → See Adult worm in Place lab → identification of larva.	signs. ← field. lab ─ No Serology. Histo Pathology ↳ brain vaculation.
Prognosis	Acc to ttt gaurded Prognosis.	• Control of Scarpe SCP Destruction of all Farm.
ttt	• adult Fly → insecticides. • larva in A → rafoxanid nitroxynil 1mL / 25 kg. Ivermectine 1Cm / 50 kg. washing Nasal Cavity by $NaHCO_3$ 1%. . [cleaning Nostril]	

Scanned by CamScanner

[14]

* other Diseases Causing Nervous Manifestation :-

[1] Rabies → history of biting.
signs differ Acc to A spp.

Cattle → Continous bellowing.
Horse → bitting his Flesh.
Sheep → extensive Sexual desire in both ♀ or ♂

[2] Hypomagnesmia
- in form of Fits نوبات
- if ttt by mg sulphate S/C - I/U → healing.

[3] Pregenancy toxemia = Ketosis :- . associated with Pregenancy.
. urine → ketons +ve by urine strip test.
. acetone odor. . if ttt by dextrose 5-10%.

[4] thiamine defecency :- ttt by vit B Complex I/U

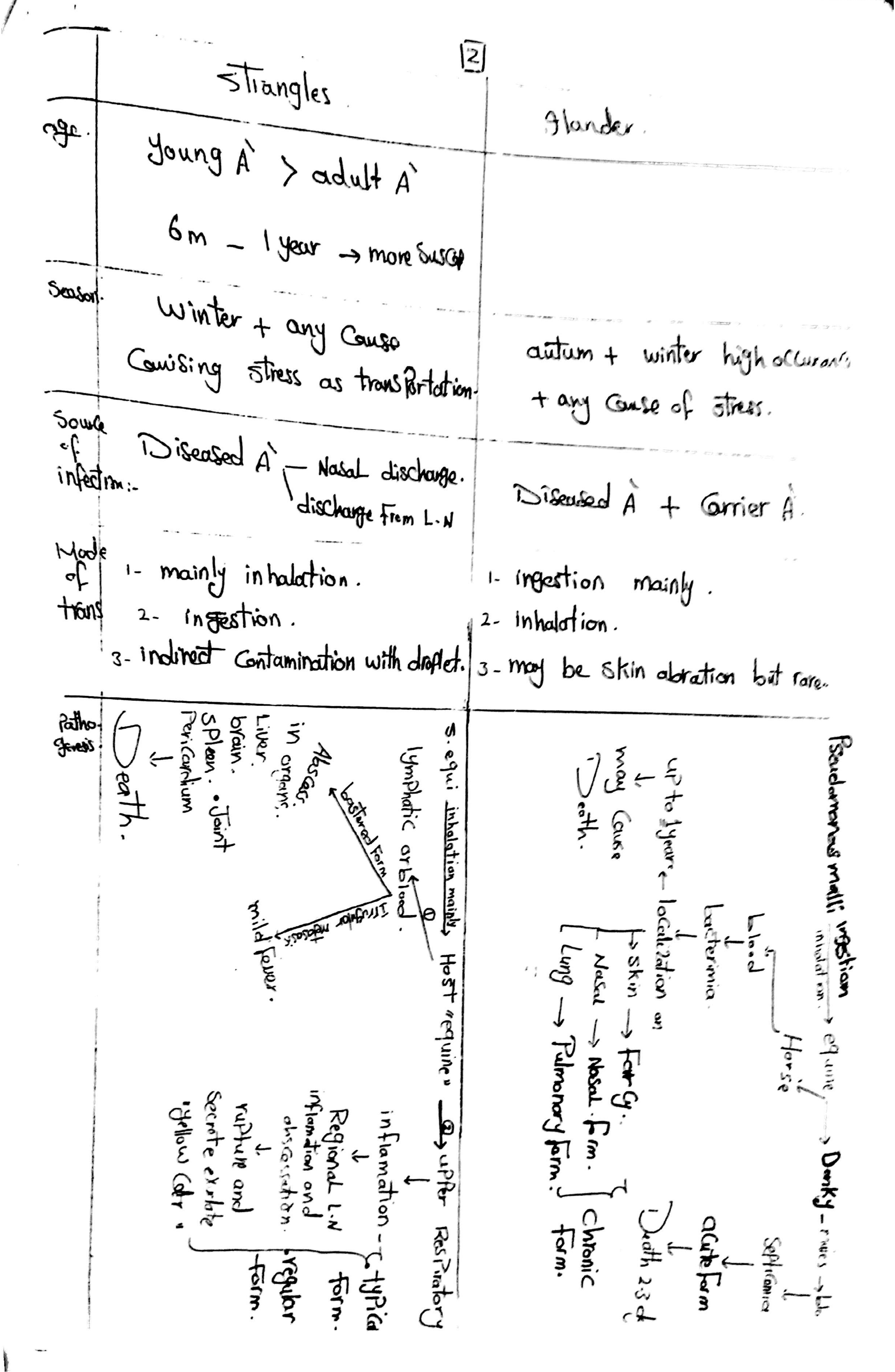
[5] Hypocalcemia * twisting of head to one side.
* Responce when treated by Ca therapy.

" good Luck "

محاضرة رقم (٥) د/ أحمد ...

م. رقم (٥)

	Strangles.	Glanders "Farcy"
Def.:-	- Acute Contiagous infectious disease of equine. - Ch' by inflamation of upper respiratory and abscesation of regional L.N — Submaxill / Parotid / retro Pharyngeal. - Come once in life and specially in young age. it may come more than once.	- Acute or chronic highly fetal Contiagous disease of equine and human. mostly acute in Donkeys and chronic In Horses. - Ch' by Formation of Nodules and ulceration in Respiratory tract and skin.
etiology	* streptococcus equi subspp equi. G +ve — Single. / Paired. / Chain. * Present in - Nasal discharge. - Pus - saliva. * Capsulated. * Virulence — hyalouronic Acid / Protien. which Prevent phagocytosis * toxin → leukocidial toxin	* Pseudomonas Malli Burkholderia Malli * G -ve bacteria.
Sus	equine only	equine - Human. Dog - Cat → may be.



2
Strangles
Glander.
age.
Young A' > adult A'
6 m - 1 year → more suscep
Season.
Winter + any cause causing stress as transportation.
autum + winter high occurance + any cause of stress.
Source of infection:-
Diseased A' — Nasal dischage. / discharge from L.N
Diseased A + Carrier A.
Mode of trans
1- mainly inhalation.
2- ingestion.
3- indirect contamination with droplet.
1- ingestion mainly.
2- inhalation.
3- may be skin abration but rare.
Patho-genesis.
S. equi inhalation mainly ① → Host "equine" ② → upper Respiratory
inflamation → Regional L.N inflamation and abscessation → rupture and secrete exudate "yellow color" — typical form. regular form.
① lymphatic or blood
bastured form → Abscess in organs. Liver. brain. spleen. Joint Pericardium → Death.
Irregular metastasis → mild fever.
Pseudomonas mallei ingestion / inhalation → equine
Horse → blood → bacteremia → localization on
→ skin → Farcy. Nasal → Nasal form. Lung → Pulmonary form. } chronic form.
up to 1 year → may cause Death.
→ Donkey - mules
Septicemia → acute form → Death 2-3 d

Clinical signs of Strangles:-

IP → 3-8 days. Course → 1-3 wks.

Typical Form "most common"

* Fever - bilatral Nasal disch
  serous → mucoid → mucopurulent
* Cough Dry then moist.
* Diffucult in swallowing.
* regurdation of Feed
* Snorting - Dyspnea.
* enlargment of L.N (Submaxill, Parotid, retro Pharyngeal)
  hottness - Pain.
* the abscess of L.N rupture may be internal or external
* Pus → yellow grenish Pus.

A Typical form.

* mild Form.
* when non Capsulated N.O
* mild Fever.
* L.N mild enlarged.
  rarly abscessation of L.N

Complications:- "Due to "Ag - Ab reaction"

1. Purprua hemorgica
   * hypersensation of Ag.Ab react
   * vasculitis in wall of bl. Vs.
   * edema in heart.
   * Petichial Hge in lips and in head - Neck may reach abdomen. + eye edema.

   Tt: Antihistaminic, Ca^{+2} solutions
2. myocarditis → due to Ag-Ab reaction in myocien in heart muscle
3. Anemia Ag-Ab reaction in wall of RBCs → rupture lead to Anemia.
4. Gutteral Pouch empyema.
   make carrier b/c - reinfection, source of infection.

* may be sinisitus and glomerulonephritis

N.B: Protien in Capsule look like myocien in heart.

bastard Form.

metastazies. abscess in different organs of body.

* Lung → Suppurative Pneumonia.
* brain → meningitis.
* Joint → arthritis, lamness.
* Heart → Pericarditis.

Prognosis ↓ bad due to "fetal" mortility → 100%.

Clinical Signs of glanders.

I.P → 2 wk to several month.

Acute Form.	Chronic Form "Farcy + Pulmonary + Nasal" form
* Fever + Coughing.	[1] Skin form "farcy" . no Systemic Reaction.
* unilatral or bilatral. Nasal discharge.	"1-2 Cm" nodules → rupture → ulcer - star like
* may be stained with blood.	honey like discharge, ocurr in hind limb, hock Joint
* ulceration of Nasal mucosa or Nasal Septum.	• lymph vesseles are affected but L.N may be affected.
* ulceration in body especially hind limb	[2] Nasal form:- "1 Cm" nodule in Nasal mucosa, Septum ulceration. "unilatral or bilatral" may be stained with blood. + submaxillary L.N may be enlarged but Not abscess.
* Death 2-3 day.	[3] Pulmonary form:- Come alone.
* Death due to < Fever, Septicemia.	* epistaxis → bilatral. * Pneumonia * Septum stained with blood.

	Strangles	Glanders
P.M		nodule Present in Lung.
D.D	[1] equine Viral arthritis → respiratory + abortion. L.N → Normal. [2] equine Viral RhinoPneumonitis. → Abortion L.N → Not enlarged [3] Pulmonary form of equine influenza → L.N enlarged but not seperated. [4] Nasal form of glanders.	farcy must be differeniate with lesion on lower limb of equine. as [1] ulcerative lymphangitis. [2] Sporotrichosis [3] E.L

	Strangles.	Glanders.
Diagnosis	[1] Field diagnosis. "Case-history + cli. signs + PM" [2] lab diagnosis. Sample → Nasal dischage - Pus · isolation on bl. agar → hemolysis. · identification by biochemical test · PCR * inculation in mice → enlarged in L.N of mice. • Smear → G+ve cocci. • Serology → passive H-A · due to Cell immunity.	[1] Field diagnosis. [2] lab diagnosis. Sample → Serum - exudate. • Serology → "CFT" inoculation of Pus or exudate in G. Pig → orchitis (straus reaction). * Malline test Forms: S/C, opthalmic, I/D result after → 24 hrs.
t.t	① Specific tt: ① Penicillin dose 10000 Iu/kg but may use 20000 Iu/kg. I/m for 5-7 day. ② inflamation → Finadyin 1 cc/ 45kg. + Analgin → 7 cc / 100kg N.B * may use Sulfenamide as antibact but not use [oxytetracycline] as it irritant and toxic in equine. Abscess:- treatment of abscess. Nursing: Complete rest with soft food • Fluid therapy of conc ringer lactate. • remove discharge and swab with Antiseptic. • remove any stress factor.	• tt is forbidden as Animal Become Carrier. • Destruction of A should be done. • If endemic Area only Sulfenamide or Nitrofurans could be used N.B Egypt Free from glanders.

	Strangles	Glanders
Control	[1] isolation For 6 wks. [2] disinfection of Place. [3] hygenic measure → Carcass +++ [4] if one abscess → open in isolate place as it can be a source of infection of the farm. Vaccination. • S. equibacterin (equibac 2) • M-Protien extract vaccine (streptvax). Age → 12 wk → 2nd dose in 15–18 wks, Route I.m N.B ← recomond Not used as it cause Post. Vacc. reaction. • Pinnacle I/N Vaccine. 2 mL —2-3 wks→ 2 mL ↓ 12 wk give local immunity depend on IgA. So no disadvantage route → I/N.	[1] detection the source of infection by malline test. [2] destriction of infected A [3] malline test every 1 month with 3 successive -ve → Free. [4] detection of carrier by CFT +ve → destruction. [5] disinfection of stables.

ω	Caseous lymphadenitis	Ulcerative lymphadenitis	Sporotrichosis
Syn.	Pseudo tuberculosis	—	—
C.A	Corynebacterium pseudotuberculosis	Corynebacterium pseudotuberculosis OR Corynebacterium ovis	sporotrichum schenkii
Host	Sheep	Horse, Cattle	Horse, Cattle
Source of Infection	Pus from opened L.N Contaminated soil as M.O still live in soil for 4-5 months.	Discharge from nodule	- Discharge from infected animal
M.O.T	- Skin abrasion, wounds	- wounds - Abrasion contaminated by pus - Insect may be.	- wounds - Abrasions
pathogenesis	M.O —wound→ host → lymph vessel near to L.N ↓ lamination; onion like appearance ↓ Blood ↓ Abscessation in organs → Lung → kidney	M.O —wound→ host → Lymphatic vessels ↓ Abscessation along lymph vessels	M.O —wound→ suspected host ↓ lymphatic vessels ↓ nodules ↓ rupture ↓ thick creamy pus

②	Caseous lymphadenitis	Ulcerative lymphadenitis	Sporotrichosis
Signs	① Cutaneous form - enlargement and abscessation of one or more lymphnodes involve superficial L.N (prescapular L.N) * Discharge → thick green pus. ② Visceral form - Emaciation & Death ewe syndrome - Bronchopneumonia - Pyelonephritis.	S/C Nodule around fetlock may enlarged to 5-7 cm ↓ rupture creamy green pus stained with blood. - lymph vessels of lower limb L.N not involved in horse. But ~~in horse~~ involved in Caseous lymphadenitis.	- Skin nodule in fetlock joint → thick creamy pus - long course → chronic - lymphangitis → Cording lymphatics with enlargment L.N.
post mortum	- Emaciated carcass - Caseous abscess discharge (greenish-yellow pus) in one or more superficial L.N pus → early, soft, pasty ↳ later, firm, dry. - laminated apperence.	—	—

③	Caseous lymphadenitis	Ulcerative lymphadenitis	Sporotrichosis
Diagnosis	- field diagnosis - lab diagnosis - Sample → pus (greenish) → affected organ pus may be ⇄ * Isolation and Identification G +ve, Cocco-bacilli chiense-letter * On blood-agar :→ pinpoint glistening colonies opaque → orange * Inoculation in ♀ G.Pig (strauss-reaction) I/P → strauss reaction I/V → * Death after 4-10 days. * Abscess in all organs	- field diagnosis ; signs - Lab diagnosis: • closed nodule (best) sample * Isolation on blood agar ↳ hemolysis * Microscope → M.O * Animal inoculation → I/P ♂ G.Pig ↓ Strauss. reaction * Biochemical test :- +ve Catalase fermentation of glucose → Acid-production * skin lesion on hind limb.	* field diagnosis * lab diagnosis: * Sample: unopened nodule * Microscopic examination ↳ Single Celled. Cigar-shape * Isolation and Identification on brain. heart agar * FAT → +ve result . Mice Inoculation by Suspected material I/P then mice sacrified in 3 weeks ↓ Smear from peritoneal exudate ↓ Cigar-shape bodies D.D ⇒ UL EL Glanders

⑧	Caseous lymphadenitis		Sporotrichosis
Control and TTT	* penicillin :- 20,000 IU/kg/b.wt - I/M - every 12-24 hours. * oxytetracyclin : - short acting → 10 mg/kg - long acting → 10 mg/kg 2 doses interval 48 hrs. I/M or I/V * Sulfonamides :- Intial dose → 100-200 mg/kg B.wt I/V Followed by 50-100 mg/kg after 12 hrs as maintenance dose every 12 hrs.	نوسه	* local treatment. * Systemic treatment :- * Na-iodide → 60-90 mg/kg B.wt Slowly I/V. مهم * K. Iodide :- orally 0,5-5 mg/kg B.wt. every week 3 times (3< SH → toxic) * Griseofulvin :- 20-25 mg/kg orally for 2 weeks then 10 mg/kg For 45 days

⑤ Diff	Glander - skin farcy	UL	EL	Sporotrichosis
etiology	Pseudomonas mall	C. ovis C. Pseudotuberculosis	Histoplasma Capsulatum var Farciminosum	Sporotrichum schenkii
lymphadenitis	+ ?	–	+	+ – with vs without
lymphangitis	+ ?	+ Cording	+ Cording	+
Color of Pus	Honey Like	Green	thick Creamy	scanty - Pale yellow - straw like colour.
Smear from Pus	G -ve	G +ve Chinese letter	- oval - Pear - Yeast like bodies - G +ve	Cigar shaped bodies.
site of lesion	hind limb usually under hock Joint	around Fetlock J. + But acc to wound site near to it	Hock Joint → But ...	- under Fetlock → But ...
Strauss reaction	+	+	–	–
Mallein Test	+	–	–	–
Form	Acute → donkey chronic → Horse	Acute	Chronic	chronic.

5	Edematous skin disease	Epizootic lymphangitis
	* occur mainly in Egyptian Buffalo.	* pseudo-glander (or) Equine histoplasmosis
C.A	-ulcerative lymphadenitis نفس	Histoplasma - capsulatum
Source of infection	" UL نفس	Fungal spores.
M.O.T	By insect	Through wound.
pathogensis	UL نفس	Sporotrichosis نفس .Lymphadenitis ⇐ ليس فيه .lymphangitis * Host → Horse
Signs	* Acute form → fewer local painful odema of one or both fore limb - enlargement of → pre scapular L.N. / → pre femoral LN. * Sub acute → pimble like S/C nodule ↓ cording lymphatics with small abscessation along course ↓ rupture → creamy pus tinged ē blood * chronic → circumscribed nodule which gradually develope to closed abscess contain yellow pus	Sign → thick creamy pus P.M → lesions confined to skin and S/C tissue enlarged lymphatic ducts with thick yellow pus.
	ulcerative lymphadnitis نفس. [illegible] → Summer → Insect → buffaloes.	

penicillin used in

① CFR → 70,000 IU

① strangles → 20,000 - 30,000 IU

③ listeria → 44,000 IU

③ Caseous lymphadenitis → 19,000 IU

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* Disease Causing lesion on hind limb through wound

→ Ulcerative Lymphadenitis

→ edematous lymphadenitis.

→ sporotrichosis

→ Farcy.

Equine Viral Rhino-Pneumonitis -EVR-

Synonyms:- Equine herpes virus, EVR, Equine viral abortion
"EHV1 and EHV4"

Defi- Acute Febrile Contagious disease Caused by equine herpes viruses ch by respiratory disease, abortion, neonatal disease and neurologic disease.

Etiology:- (A) EHV1 → abortion - Rhino-Pnumonitis - encephalomyelitis.
- Prenatal mortality.

(B) EHV2 → Mild respiratory disease.

(C) EHV3 → Coital exanthesma.

(D) EHV-4 → Rhino Pneumonitis - rarly abortion.

So The disease caused by EHV1 and EHV4

N.B * There are antigenic similarities with the bovine herps virus IBR/IPV.

+ The virus grow on many cell causing INIB

Epidemiology-
(1) Distrubution- USA, South Africa, Egypt and Europe.

(2) Source of infection-
+ nasal discharge for 2-3 weeks.
+ uterine discharge.
+ Diseased horses.

(3) Mode of Transmission-
+ Inhalation
+ Ingestion.

(4) Host- (1) Horse then Donkey → mules.

(5) Factors affecting susceplibility-
(A) seson → Common in winter and autumn
(B) Age → all ages but "4-8 m" are more susceptible to respiratory

nc Pregnant mares show abortion.

e.g. encephalomylities occur in mare after parturation.

[b] Economic importance
+ work production
- abortion storm in pregnant mare.

Pathogenesis

EHV1 and EHV4 → respiratory tract epithelium → damage and necrosis of the respiratory epithelium.
↓
Local Ln → virenia for 2 week → Tropism for endothelial cells
so
→ uterus → delayed abortion
→ lung → Rhinopnumonia
→ nervous system → encephalomylities.
→ vasculities and thrombosis.

clinical signs

1- IP → 2-10 days. 2- high mortality 3- Low morbidity.
4- Course 1-3 weeks.

Forms [A] Rhinopnumonitis. ~ respiratory form ~
ch by + mild fever for one week
+ short dry cough then become moist
+ watery nasal discharge then mucopulerent
+ dullness and anorexia.

[B] Delayed abortion ~ abortion form ~
+ respiratory form may be followed by abortion in 60-90% of pregnant mares within 2-16 weeks.
+ after exposure of virus abortion occurs between 8-11 months.

[C] in foal from infected dam.
normal birth but become weak and die within 3 day.
" sleepy foal ~

...cephalic Form.

+ Neurological signs in mare after Foaling or during abortion.

+ It can occure after outbreak of EHV, respiratory infection

+ Ataxia then recumbency.

PM

+ Rhinitis and Pneumonitis.
+ Aborted Fetus show sever Pulmonary Congestion and Focal hepatic necrosis
+ Fluid in the pleural cavity.
+

Diagnosis ~

(1) Field ~ high incidence of abortions in Convalescent pregnant mare
+ signs of respiratory tract infections.

(2) lab diagnosis.
Sample (1) swab from naso-pharyngeal secretions
→ Put on ice refrigerated at 4°C – ?
(2) Aborted Fetus should be Frozen.

For serological examination used Paired sera.
~ Detection of Ab → use SNT, CFT, ELISA, IFT
+ Histo Pathology ~ Demonstration of esinophilic INIB

D.D

A – Disease causing respiratory disease as Strangles – EVA, Equine Rhino virus. equine adeno virus.

B – Disease ~ nervous signs ~ as Rabies and Equine encephalomyelitis

(C) ~ " abortion in pregnant mare ~ Salmonella.

Prognosis Favorable.

Non specific T.T

+ medicated stem inhalation
as Vapazol ~ Comfor → decongestant. بالبخار
evaboration

drug —
+ Hot H2O —

+ Ab.
+ supportive T.T.
N.B → T.T as T.T of Pneumonia.

N.B * Short Immunity after vaccination only for 3 month
So must be repeated every 3 month.

Prevention and control
(1) hygienic measures
→ Isolation
→ strict quarantine.
→ Contaminated area should be cleaned.
→ hygienic disposal of aborted fetus.

(2) Vaccination
(1) Killed
→ Pregnant → 2ml I/M
at 5th - 7th - 9th month
of pregnancy.
→ Foal → 2ml every 3m.

(2) Modified ~~Killed~~ Live attenuated.
1ml every 3m
→ Foal
→ mare

Equine Viral Arteritis -EVA-

Synonyms-
Equine viral arteritis -EVA- , viral arteritis.
Cellulitis Pink , eye syndrome . . التهاب العين الوردي في الخيول

Def acute contagious viral disease ch by influenza abortion syndrome and specific lesion in small arteries.

Etiology-
Arterivirus → Family arteriviridae.

Transmission - (1) source of infection-
Diseased horses.
+ respiratory discharge
+ vaginal secretions.

(2) mode of Transmission
Inhalation.

Pathogenesis and Signs-
EVA —Inhalation→ Pulmonary epithelium. → bronchial Ln
↓
Viremia.
Vascular damage in small arteries. ← Viremia
In
- → Intestine → Hge enteritis, diarrhea, abdominal Pain → dehydration → Death.
- → Lung → edema , pleural effusion. sever dyspnea.
- → uterus → Abortion due to sever necrotizing myometritis.
- → eye → Periorbital edema. + Cellulitis Pink.

. congested internal organs.
+ edema in lung .. plural cavity.
which contain fluids.
+ myometritis.

باقي
م. رقم (7)

Diagnosis → Field
→ Lab

Sample → Intestine - lung - uterus.

Isolation. → Histo Pathb + Formalin

Specimen should be frozen at -20°C

+ Serological → Paired sera.

T.T → non specific
symptomatic.

N.B recovered horses have longstanding immunity.

Protection

Vaccine It is safe and effective for → stallions
→ non pregnant mare.

while not recommended in pregnant mare
espically in late stage or in foals less
than 6 weeks of age.

To avoid interference with maternal Ab.

	african Horse sickness	Equine Influenza ⓥ
Def	-acute or sub acute highly fetal infections not Contagious viral disease ch' by - fever - Lung edema - Heamorrhge -S/C edema → specially in head (supra orbital fossa)	-Highly Contigious viral disease in equine ch' by -fever -presistent Cough - ↑morbidity - ↓mortality -Sudden dealth -Rapid spreed -Lacrimation & nasal discharge -self -Limitting with 1:2 week
Cause	family → Reovirdea , G:orbivirus (AHS) virus * 9 strain → strain 9 is more common in Egypt *42 ~~strain~~ Serotype → cross protection not complete grow in :- - T.C - ECE - Mice	F: orthomyxovirdiea , G: influenza V 2 strains: → A/equi/1 H_7N_7 (RNA) → A/equi/2 H_3N_8 *sensitive & fragile (HA & HI)
suscep.	Horse > mule > donkey Dogs take disease when eat infected dead horse carcass	Equine (Horse - mule - donkey) Age: sever in young 6 month, then adult Common in 1:3 year -old horse → take disease subclinical predisposing factors → cold in winter
Mode of trans.	→ Vector (insects) → culicoids → mainly ♀ & Blood suckling Arthropods → Mainly Biological / Mechanical -Blood transfusion - through contominated syring -Dogs infected by eating infected dead horse carcass seasonal : specially in summer	Inhalation mainly (Aerosal - dropling

	African Horse sickness	Equine Influnza
pathogensis	Virus → Host —Calicoids / Biological→ Blood —fever→ viremia —Localized→ in Bl.V → Vasculitis ↓ Heart ↓ Pericardium ↓ edema → pericarditis → death ↓ Lung edema ↓ Sever progressive edema → death ↓ - S/C edema (anasarca)	————
cl. signs	④ forms **- acute palmonary** • thin head. - Common in horses during outbreak - mortality 90 % - Ip 3:5 day - fever 1:3 day - ConJunctivies - Cough - Respiratory signs - dysnea - sever progressive edema - staggering - Recumbancy - death, sweating - froth discharge from mouth before death **- subacute Cardic** • thick head. - Common on donkey - may be in horse - mortality 50% - fever 5:7 day - conjuncativites - edema in eyelid - Cyonasis gum mucosa - Cyonosis baccal * edema in head • supra orbital fossa bi-lateral. - Death 1:2 week due to heart failure **mixed** - rare - palmonary Cardic **mild** - more Common in donkey than horse. - fever 1:5 d - mild Conjun. - anorexia - dyspnea	Ip : sharp 3:4 days Course → 1:3 week - morbility high 90:100 % - mortality Low (no) * Sub-maxillary L.N → painful / → not enlarged / → enlarged in Complications only. * fever 1:3 day - nasal discharge. - Lacrimation. - Conjuntivies _ Rhinits - Cough → dry then moist / → 1week: 3 weeks Respiratory signs:- Complications:- - Pnemonia - Lorngitis - Bronchitis - enlarged L.N - sever in young (foals) from infected dam than from healthy dam

②

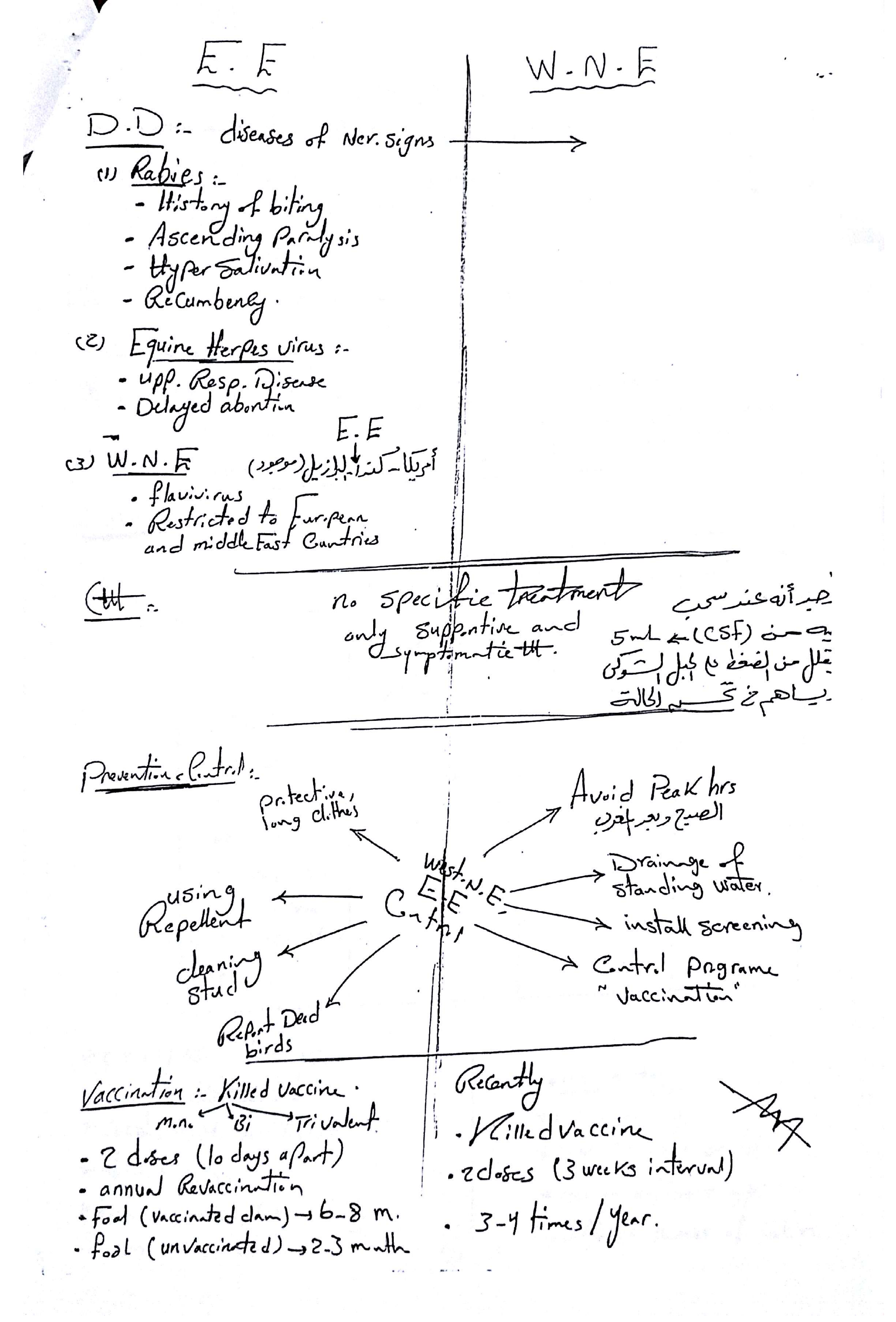
	african horse sickness	Equine Influnza
P.M	① palmonary form - edema in Lung - Hydrothorax - entarged & heamorrhagic throcic & Abdominal L.N ② Cardic form - Hydropericardium - Anasarca	————
Diagnosis	Signs - History - P.M - Summer season - isolation & identification Sample : Blood early febrile stage. Refrigated 4°C not frozen as blue tongue - Lung -spleen - L.N - T.C → vero cells - BHK_{21} - animal inoculation I/C mice death 3:4 day ECE → CAM → 9:11 day * Seriology : CFT, FAT, Eliza, SNT	- CL. signs - sample - nasal swab - T.C - ECE → CAM - seriology → HA & HI - VNT, PCR → to differentiate between strains
D.D	Palmonary dis. * strangles * glanders * EIA * EVA * Rhinpnemonia * adenovirus * Reo virus Cardic dis. "anasarca" * EIA * EVA * Babesia & dourine * pupra hemorrhagic as complications of strangels N.B : Recovered animal called "salted animal" Immunized not carrier, But in glander → carrier	Palmonary dis. * strangles * glanders * EIA * EVA * Rhinpnemonia * adeno virus * Reo virus

	African horse sickness	Equine Influnza
ttt	- bad prognosis specially in palmonary form - syptomatic ttt with low value → decrease virulence only	syptomatic * antibiotic → prevent complication * antipyrtic * Hyper Immuno serum * Rest 2:3 week * Immuno stimulant → vit AD_3E * avoid cold weather * placed in quiet place
Control	**Control** * notification * Quarantine 60 day * vector control as B.T * Housing at night in insect proof stable. * Transprotation at night **Vaccination** ① poly valent contain 9 strain poly valent Tissue culture (Live) * dose 2mL, S/C, 2 year immunity * virus viscrotropic → I/C in mice —passage 102 times→ nerotropic ② inactivated vaccine [trivalent, Bivelent, poly valent] 5mL —1 month interval→ 5mL, I/M or S/C, 6 month immunity	Ⓐ Hygienic measure:- - isolation. - cleaning - disinfection 10% formaline for stable, eqipment. - Qurantine - new introduced A' → Quarantine for 2 week Ⓑ Vaccination "2 vaccines" ① inactivated vaccine:- → Bivalent vaccine for 2 strains 3mL I/M —1:3 m interval→ 3mL 6 month immunity. * Complete rest must be done after vaccination to avoid complications as: myositis & myocarditis. → foal from vaccinated mare → vaccinated at 6m → foal from non-vaccinated mare → vaccinated at 3m * intranasal vaccine • local immunity • save

	Equine Encephalomyelitis	West Nile Encephalitis
Synonyms :-	• Venezuelan E.E • Eastern E.E • Western E.E	—
Definition :-	• Acute sporadic viral Disease • mainly affect bird, • accidentally in equine - bovine • characterized by nervious. manif. • Transmitted by insect.	• Acute, subAcute viral Dis. • affecting Horses and Human • Transmitted by insects "Mosquitoes" • charact. by mild fever, blindness, nervous. Manif.
etiology :-	Togaviridae (fam) Alphavirus (genus) • Three strains → EEE, → WEE, → VEE } immunologically distinct. • viruses are fragile → Death after Death of Host by few Hrs.	Flaviviridae (fam) flavivirus (genus)
epidemiology Transmission :-	insect bite.	insect bite (Horse is terminal Host)
Host suscept. :-	• mainly birds • Accidental → Horses → Human	• Horses - Humans.
Factor aff. suscept. :-	during Period of High insect Activity	
Economic import. :-	- Death - Public Health importance	

E.E	W.N.E
Clinical signs:-	
• I-P (2-3 ws)	• I-P (2-5 days)
• initial fever for 24-72 hr (39-41) with anorexia, depression	• mild fever "biphasic"
N.B EEE + WEE → diphasic fever	• Nervous signs → incoordination → Ataxia → Hyper Excitability → Head pressing
• Nervous signs at Peak of fever.	• Recumbancy
• Hypersensitivity, aggressiveness	• Saw Horse appearance
• blindness, Head pressing	
• Circling, facial Paralysis	
Saw Horse appearance → sleeper	
زي ما يكون نايم غ غيبوبة وحاجة يعني تاني	
PM: No gross changes	• Congestion + Petechial Hg in mucosa of Cerebral surface, Bladder and GIT.
	• Non suppura Encephalomyelitis.
Diagnosis	
Field D: • clinical signs • seasonal occurence	→
lab D:-	
(1) Sample :- • brain stem • CSF • Blood (refrigerated)	(1) Sample • brain • Blood • CSF
(2) Detection of antigen	(2) detection of antibody by VNT
(3) isolation by inoculation in old mice (1-4 day) → dead → brain Detect virus by (CFT + FAT)	(3) Paired Serum Sample.
(4) PCR + ELISA + VNT	(4) insect in place
(5) Paired Serum Sample	(5) Histopathological Exam. of brain
	(6) PCR + ELISA During viremia (1-5 day) → detect vir. in Blood; after 7th day → Serum → IgM

Scanned by CamScanner



E.E | W.N.E

D.D :- diseases of Ner. signs →

(1) **Rabies :-**
- History of biting
- Ascending Paralysis
- Hyper Salivation
- Recumbency.

(2) **Equine Herpes virus :-**
- upp. Resp. Disease
- Delayed abortion

(3) **W.N.E** — E.E ↓ أمريكا - كندا - البرازيل (موجود)
- flavivirus
- Restricted to European and middle East Countries

Ttt :- no specific treatment only supportive and symptomatic ttt.

يفيد أنه عند سحب 5ml من (CSF) يقلل من الضغط على الحبل الشوكي يساهم في تحسين الحالة

Prevention & Control :-

E.E / West.N.E. Control:
- protective, long clothes
- using Repellent
- cleaning stud
- Report Dead birds
- Avoid Peak hrs الصبح وبعد المغرب
- Drainage of standing water.
- install screening
- Control programe "vaccination"

Vaccination :- Killed vaccine. (m.no, Bi, Trivalent)
- 2 doses (10 days apart)
- annual Revaccination
- Foal (vaccinated dam) → 6-8 m.
- foal (unvaccinated) → 2-3 month

Recently
- Killed vaccine
- 2 doses (3 weeks interval)
- 3-4 times / Year.

Calf disease

* Respiratory disease complex (calf pneumonia), RDC
  - oral necro bacillosis
  - Navel ill.

٢. رقم ⑨

II RDC

Def: multi-factorial disease (→ viral, → Bacterial, → parasitic) affected calf 1:4 month, in cold weather.

⊕ Severity
- → acute → fetal
- → subclinical
- → chronic

} - depend on interaction of multi factorial causes (Bact., viral, parasitic) and environmental & Resistance of the calf.

Causes:

viral	Bacterial	parasitic	mycoplasma
* PI3 * BRSV * IBR * BVD * Rhino virus * Reo virus * adeno virus - most of them upper respiratory diseases	* pasterlla * staph * strept * Coryne	* Lung worm (Dictycolus viviparus)	

* predisposing factors:-

→ environmental
* Cold, R.H, ventillation
* affect cillia
* ↓ alveolar macrophage activity
* m.m secretion.

→ mangmental
* over crowding
* take colstrum or not
* rearing different ages
* different sources of calves.

* Host susceptability	Mode of trans.
- Calf 1:4 month mainly, may ↓ or ↑	inhalation → droplet → areosol

Signs:-

- Morbidity → High 90:100%
- Mortality → Vary acc. to severity of pathogen, ↑↓ 30%

* acute:-

- fever
- Cough → dry → moist
- dyspnea + respiratory signs
- Lacermation
- nasal discharge (serus → mucoid → purlent)

* chronic:-

- normal temp.
- mild nasal discharge (purlent)
- mild Cough & Sample.

diagnosis:-

1- Sample: nasal swab, If suspected → Viral (step 2 & 3)
→ Bacterial → media → isolation

2- T.C → Confirm by VNT

3- Serology → Serum sample → CFT → SNT → ELisa

P.M - grey or red hepatization Acc. to severity

- Lung edema.
- L.N enlarged (thoracic Ln)

NB:-

١- فى كل أمراض Calf نفحص محاليل
٢- فى كل أمراض Calf نبدأ بـ supportive
٣- على عكس كل أمراض المعدية نبدأ بـ supportive بعدين specific

tretment مهم

① **antibiotic** → to prevent Complications

- Broad spectrum

* Draxin 1mL/40 kg, I M, one time
* If Confirm pasterlla → sulfa
* tylosine → mycoplasma
  1 Cm / 10 kg

* amoxycillin
* ceprofloxacin
* gentamycine
* erthromycine
* tetracyclines

② **anti-inflamatory** → finadyne

- ↓ severity
- ↓ fever

③ **anti histaminic** AviL ampol / 70kg

④ **Bronch dilator** → Aminophylen ampol / 70 kg

⑤ **supportive ttt:-**
- → fluid therapy
- → vit. C, vit B, vit E. se

* **fluid Therapy:-**
  - → Saline 0.09 %
  - → Ringer
  - → Lactate Ringer → the best
  - → dextrose
  - → isotonic Na-bicarbonate:

Na-bicarbonate —تحل→ 1.5 % → I/V

الجرعة
- → العجل أقل من ١ اسبوع ← ١ لتر
- → العجل أكثر من ١ اسبوع ← ٢:٣ لتر

or بالمعادلة →

$$\frac{B.wt \times 15 \times 0.6}{12} = \ldots \text{ gm}$$ —تحل حتى→ 1.5 %

* fluid therapy جرعة الـ

* 5:6% → الحيوان واقف → oral adminstration
* 6:8% → → I/V لازم
* 8:10% → sternal Recumbancy but allert
* 10:14% → Lateral Recumbancy + Collapse → hopeless

المعادلة → $\frac{\text{B.wt} \times \text{dehydration degree}}{100}$

أو → كل 1 كجم وزن → 100 mL

total لا تعطى الكمية مرة واحدة، كل 4 ساعات كمية من الـ

* Control

① avoid predisposing factors
② sufficent amount of clostrum.
③ Vaccination.

- dam :. pregnant dam take vaccine, If it in the Last stage
  - the 2nd dose befor parturation by 2 weeks
  - Calf must take colstrum in the first 6 hrs (80 mL/kg)
- Calf → not before 8:10 week or 12 week

* Vaccinces of RDC

① pnemo 3 (PI3, IBR, BUD)
② pnemo 4 (PI3, IBR, BUD, BR synctial)
③ ~~[illegible]~~ vera cell 5 Veri-Sheild 5

} - inital 5 mL →(4 weeks interval)→ 5 mL as Booster dose, S/C, 6 month immunity

④ cattle master 4 (PI3, BUD, IBR, ~~BR synth~~ BR synctial)
2 mL →(1 month interval)→ 2 mL, IM, 1 year immunity

N.B:
الأربع فاكسينات بيستخدموا في 3 month calf + pregnant dam in Late stage
5 mL or 2 mL then before parturtion by 2 weeks

oral Necrobacillosis

* age → 2weeks : 1 year
* Bacterial disease affect calf from the age of 2 weeks to 1 year.

→ 2 forms
- → necrotic stomatitis
  - necrosis in buccal mucosa At 2w : 3 m
- → calf dipthria
  - In pharynx & Larynx At 3m : 1 year

*Causes :-

- fusiform bacterium necrophorum = ~~sph~~ sph. necrophorum
  G -ve

* susceptability

Calf 2w : 1 year
- → 2w : 3m
- → 3m : 1year

* Mode of trans.

abrasion in buccal mucosa

* Signs:-

1 necrotic stomatitis

- fever
- Salvation
- edema in checks
- Bad odeur from mouth
- ulceration and necrosis in buccal mucosa (Long & deep)
- cheesy material difficult to remote.
- ulcer in all mucosa of mouth

2 calf diphtheria (more dangerous)

- fever
- saliuation.
- Bad offensive odeur
- edema in pharynx & Larynx
- Cough & dyspena
- may pneumonia
- ulceration + diptheric membrane in pharynx & Larynx → may close it

* diagnosis:-

isolation on media

* **treatment**

① Local antiseptic (tr. iodine)

② Anti microbial injection → drug of choise is "33% sulfonamide"

1st day → 140 mg/kg

2nd, 3rd day → 70 mg/kg

or 60 cm → 100 kg

---

navel ill = Joint ill

Def: inflammation of umblicus = omphalitis

- in young age in 1st week of ages.

* **Causes:-**

- E-Coli
- strept
- sph. necrophrom
- coryne pyogens

* If infectious progress internally → omphalophlibitis
* may septicemia → Joint → Joint ill = poly arthritis

* **D-D:-**

hernia → ضع يدك فى السرة ، وشوف علامات الالتهاب

* **treatment**

→ If local omphalitis → as abceses

If progress → systemic Ab

١٠ ع	Rabies (Canine diseases) Mad dog	Canine parvo virus (١١)
Def	- Highly fatal viral disease of all worm blooded animals including human ch' by: - encephalities - paralysis - death	- Highly Contagious viral disease of Young dogs (puppies) ch' by :- fever, Vomiting, durrhea dehydration → death or myocarditis → sudden death
Cause	family → Rhabdoviridea G → Lyssa virus RNA, fragile - 56% → 5 min kill Virus or 1% formaline	DNA virus F → parvoviridea G → parvovirus type II derivated from porvovirus type I which G (cause pan Leukopenia feline)
Source	Saliva of Rabid animal	feces & ground
susp.	- all worm blooded animal specially Carniverous & cattle sheep, goat, human - all sexs & all ages	- dogs age → 1:2 months → myocarditis → sudden death - 2:9 month → enteric form (fever, diarrhea)
transmission أهم علامة	- mainly by bites of rabid dog → wound → contamination by saliva which has the virus. - not all bites from rabid animal → transfer disease - wound - abrasion - scratch Contaminated by saliva - oral route → rarely - Bats خفاش → Resvoir → virus multiply fatty tissew → Vampire Bat → Caves → fruit Bat → Egypt	oral fecal Route → ingestion

	Rabies	Canine parvo virus
pathogenesis	Virus → Bitting by Rabid animal → wound Contaminated Saliva → several hours at site of bite → Nerve of ms → perephral nerves → Brain encephlitis During paralysis → Nerve → salivary gland → Saliva death	Virus → ingestion → puppies 1:2 month: myocarditis → sudden death 2:9 month: * intestine → multip. crypt cells → sever Hgic entrit Vomiting → Bloody diarrhea dehydration - death
cl. signs	Ip varies 15day → 6month → 1 years why? → susceptable host → site of bite → dose of virus Course 2:10 day Signs : 3 phases ① prodromal phase (2:3)d - normal temp - stop eating & drinking - change behavior - frequnt urination - salivation ② Exciting phase (2:3)d - salivation - change fucial parameters - dilation of eye pupil - change voice - Running at straight line for long distance with careless - deprived appetite - Bite Human or animal - sexual desire ♂ (erection of penis) ③ paralytic phase (dump) (2:3) d خرف - salivation - drop of lower Jaw - progressive paralysis Head & neck. - inability to swallow [illegible] fatality 100%	2 form * enteric form - fever - vomiting - Bloody diarrhea - dehydration - coma, death * myocardial form - myocarditis - sudden death P.M * enteric form - sever heamorrhageic entritis - dehydration * myocardial form - myocarditis - strikeson heart - myocardial fluid

Rabies

cl. signs	sheep	equine
* Cattle corse 7:10 day - Bellowing + salivation - stop eating & drinking - sexual desive - sway back = paralysis Coma, death - suckling sound → Anus من فتحة - Hypersensitive	vigerous wool pulling يقطع صوفها	- salivation - hypersensitive - flehming position يرفع lips ويبين سنانه

diagnosis

* History of Bites + signs

* isolation & identification sompk (Brain, salivary gland, saliva)
  ↳ the best
* identification → FAT the best method

→ Histopathology

Brain smear staind by Seller Gemsa stain
↳ negri bodies (عدم وجودها لا ينفي وجود المرض)

* 70 : 80 % posative
  20 : 30 % false negative

→ Histopathology Negri bodies

→ isolation T-C, detection by FAT
incubation mice I/C 10 days paralysis & death

---

parvo virus

diagnosis

* History - P.M - Signs
Age susceptability
* Solution → sample, fecal sample
* T-C
* Seriology → ELIZA, FAT

Control:-

* Vaccination
- modified live vaccine 1ml / S/C annually
* multi vaccine 1ml, S/C Annually.
* Hygienic measure

Rabies

D.D

- pseudo Rabies
- distemper Canine.
- infectious Canine hepatitis

ttt

post signs → No treatment

+ prosigns → ① washing wound by worm water + soap
  ② local antiseptic
  ③ anti-rabid immunserum 20 IU/kg in human

+ Control:-

① Vaccination of dogs
② Elimination strey dogs
③ Elimination of fox & wolves
④ Biten animal from rabid dog

Human ↓
- wash with water & Soap
- Vaccination IG

demastic animal
+ slaughter

Canine
- Not Vaccinated ↓ destroy
- Vaccinated ↓ re-vaccination

+ Vaccination

① inactivated

simple vaccine
- Canine T.C inactivated by formaline
- Canine T.C inactivated by formaline + oil adjuvant.
- 1 Cm, S/C → 1 year immunity (3:4) month مش موجود في مصر

② Live attenuted

[1] flury strain LEP → dog
40:50 passage → 2 years immunity

[2] Flury strain HEP → cat
80:100 passage → Long immunity

[3] Modified Live flury LEP
dissolved 3mL water I/M 2 years

	Rabies (Mad dog)	Pseudo Rabies · mad Itch.
Cause	Lyssa virus RNA	Herpes virus DNA
Transmission	Bite	ingestion - Inhalation mainly abrasion not Common
Reservoir	Bat	pig
I.p	15 day - 6 month - 1 year	1week → 2weeks
Course	10 days	2:3 day
Virus	-demonestrated at saliva -not in Blood	-not in saliva -demonestrated in Blood
Signs.		
- temp.	normal	raise temp
dropping Lower Jaw	+	-
		-
- Sexual desire	+	+
- Cough Peneumonia	-	+
- Sever Itching .puritus.	-	
- Histopathology	- ICIB Negri body	INIB

(5)

(11) ملاحظة مهمة

(!!!) of parvo, distimper, Blue eye

Common Signs * Vomiting, diarrhea, dehydration, fever

Antipyretic : Cetal, dolphin 3 ml oral
fynadine 0.5 - 1 ml

Antiemetic : Primperan 0.5 ampule 12 hrs → 0.5 ampule
Zantac 0.5 ampule → 0.5 ampule

Antiinflamatory dexamethazone 0.5 - 1 Ampule

oral / I/M

Antibiotic Amoxycillin gentamycin, Cefotax

fluid therapy Ringer dextrose Saline Ringer lactate I/V
Rehydran oral

سعار | Rabies

لو في كلب عض انسان أو حيوان نحبس الكلب
١٠ أيام لو ظهرت عليه الأعراض وبيمات

١- الحيوان domestic à ← أدبح
قط / كلب ← أتخلص منه
انسان ← التحصين و Antirabies
لو الكلب عض وجري ← اعطي اللقاح

Canine distemper طاعون الكلاب
African horse sickness طاعون الخيل
Pestis des petits ruminants طاعون المجترات الصغيرة
Rinder Pest الطاعون البقري

Canine distemper cross protection with human measles
PPR R.P Hendra disease in equine

أكثر أساني واعترضي تكلمي

Canine distemper = Hard pad disease

Def ★ Highly contagious viral disease of young pupies, dog. Characterised by fever, gastroenteritis, bronchitis, Hyperkeratosis, conjunctivitis

Cause: Paramyxoviridae — morbillivirus
Sensitive, fragile outside host

Suss. pupies, fox, wolves
3–6 months — Adult (mild, subclinical)

transmission inhalation of droplets
ingestion of contaminated food, water, milk

predisposing factors young age / cold weather

Pathogenesis

Virus —inhalation / ingestion→ Host (pupies) 3-6 months —lymph→ Blood (Viremia) Fever

—Localization→ GIT / Resp / Eye / Skin / Brain (encephalitis rare)

في الغالب شكل واحد فقط بيكون موجود
نادرا ما تحصل جميع الأشكال مرة واحدة

IP / 4–7 days

Signs

General: fever, depression, Anorexia, off food, fatigue

Alimentary Form (digestive Form): Fever, Vomiting, Bloody diarrhea, dehydration → death

Respiratory Form : Fever, nasal discharge, Coughing, sneezing.

Conjunctival (eye) Form : Conjunctivitis, Lacrimation (purulent)
↳ adhesion in eye lids —scratch→ Keratitis, ulcers, Corneal opacity

Skin form : Skin nodules on abdomen, hyperkeratosis on leg pad
red spots ←(or)→ and inner thigh

نادر **Nervous form** : spasm in muscles, incoordination, salivation
encephalitis / Chewing gum / excitment / Coma / death
↳ لا يأتي وحده في الغالب يأتي بعد انتهاء أعراض الأشكال الأخرى

Diagnosis signs, age susceptibility
Viral isolation on T.C & Lab à (Ferrets) العرسه.

Samples → Whole blood during Viremia
Nasal discharge, digestive & eye secretions

Serology → ELISA, CFT, FAT

DD Digestive (parvo, Corona, rota, Salmonella)
Resp Herpes, —
eye form Blue eye

Tt Symptomatic العلاج الأعراضي

Control vaccine
Modified live Vaccine 1 ml S/C 1 Year Immunity

Canine infectious hepatitis = Blue eye disease

Highly Contagious Viral disease of dog, fox Characterised by Fever Vomiting Bloody diarrhea Jaundice

Cause Adenovirus type 1 — 1, 2 Cross protection

(N.B) Adeno 2 Respiratory only

Sus. Allages — Young more Sever — dog, Fox

transmission fecal oral route

I.P / 1 Week

Signs

Peracute : Sudden death

Acute : Fever – vomiting – Bloody diarrhea
abdominal pain due to hepatitis – Jaundice
Nervous signs – Coma – death

Blue eye Corneal opacity appear later after disappearance of signs by 2-3 Weeks

بيعمل زي ال distemper → immune response (Ag Ab reaction ppt on eye)

(P.M) Liner enlarged, Congested, mottled, edematous
Carcass → Jaundice

(N.B) Mainly mild, Chronic / Recovered dog become Carrier and shed the virus in urine for up to 1 year

Diagnosis Signs , PM

Samples → Blood during viremia - Liver - Ln

isolation on T.C

Serology CFT ELISA

(Ttt) Symptomatic من الصفحه الأولى

Control Vaccine

modified live vaccine 1 ml S/C 1 year immunity

N.B Multivaccine خماسي - سباعي - ثماني - تساعي

1 ml S/C 1 year immunity

at 3 months of age

كل التحصينات عند عمر ٣ شهور

N.B Canine hepatitis in fox → encephalitis

مهمة Nervous signs in dog

Rabies , Pseudorabies , Canine hepatitis , Nervous form of distemper , Cerebral babesiosis

قبلة (معلومات اثراعية) (?)

in Dogs نبر (?)

External parasites

↓ Mange, mite, fleas, ticks

Local Butox 1 ml /Litter

يستخدم في الجرب في الانسان ectomethrine Spray

Barsc, revolution ? Pour on

تنقط على ظهر الحيوان

injection 0.5 ml dectomax S/C

0.5 ml ivamac S/C

Mange in animal = Scabies in human

Ring Worms قوبا (?) Circumscribed area of loss of hair

head, neck, leg

Local, oral, injection عكسية (?)

- mycoderm
- mycostatin
- Tincture iodide 2-3 %
- Canastin
- Closob Spray

→ Griseofulvin tablets

Flucarat -